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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,888

10/24/2005

Tadashi Hibino

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EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT

PAPER NUMBER

3676

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DELIVERY MODE

06/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,888	<b>Applicant(s)</b> HIBINO ET AL.	
	<b>Examiner</b> Christopher Boswell	<b>Art Unit</b> 3676	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/24/05</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 12 and 13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,685,180 to Qualters et al.

Qualters et al. disclose a steering locking device comprising a locking device (components held within housing 5) for automatically locking a steering shaft (1) when a key (20) of an ignition switch (15) is withdrawn in a state in which the key is withdrawable (column

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4, lines 3-13), wherein a key mechanism section (14) and the locking device of the ignition switch are provided separately (figures 2 and 4), and the locking device is provided at any portion on an output shaft (shaft on which gear 4 is mounted) of a steering wheel (3) extending from the steering wheel to a steering gear section (4), as in claim 1.

Qualters et al. also disclose the locking device is provided at the steering gear section having a rack & pinion mechanism (4 and 8), as in claim 2, wherein the locking device is provided on a lower side of a rack shaft (4) near a lower end of the pinion shaft of the steering gear section (figure 4), as in claim 7, and the locking device is provided about a pinion shaft (6) of the steering gear section, as in claim 3, wherein the locking device is provided on a lower side of a rack shaft (8) near a lower end of the pinion shaft of the steering gear section (figures 2 and 5), as in claim 8, as well as the locking device is provided on a side of an output shaft (6) of a speed reduction unit (4 and 8) of a column-type electric power steering apparatus, as in claim 4, wherein the locking device is provided on the output shaft of the speed reduction unit (figures 2 and 5), as in claim 5, and the locking device is provided on a yoke (5) connected to the output shaft of the speed reduction unit, as in claim 6.

Qualters et al. further discloses the locking device is integrally formed with the steering gear section (figures 2 and 5), as in claims 9-11, and the locking device has a key lock collar (5), the key lock collar is formed on an output shaft of the steering wheel via a ring member (the collar that retains housing 5 on the steering shaft), as in claims 12 and 13, as well as a groove for a key lock (14) is formed to an output shaft of the steering wheel, as in claims 16 and 17, and where the locking device electrically makes a lock pin (6) reciprocate based on a key information supplied via a harness connector (column 4, lines 3-13), as in claim 18.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qualters et al., as applied above, in view of U.S. Patent Number 6,237,376 to Surratt.

Qualters et al. discloses the invention substantially as claimed. However, Qualters et al. does not disclose the key lock collar being welded to the output shaft. Surratt teaches of a steering assembly lock (20) being welded (column 3, lines 19-20) to a housing (12) in the analogous art of rotating shaft locking assemblies for the purpose of securely affixing the key lock collar onto the output shaft. It would have been obvious to one with ordinary skill in the art at the time the invention was made to weld the key lock collar of Qualters et al. to the output shaft of the steering wheel, as taught by Surratt in order to securely affix the key lock collar onto the output shaft. Wherein the limitation that the key lock collar being welded to the output shaft is considered a product by process type limitation, wherein Qualters et al. discloses that same physical structure as claimed.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to steering shaft locking assemblies:

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U.S. Patent Number 6,327,882 to Canard, U.S. Patent Number 5,951,031 to Shimizu et al., U.S. Patent Number 5,121,616 to Rind, U.S. Patent Number 5,117,664 to Kurozu et al., U.S. Patent Number 4,991,458 to Stuedemann, U.S. Patent Number 4,427,967 to Maiocco, U.S. Patent Number 4,400,954 to Nakamoto et al., U.S. Patent Number 4,332,306 to Turatti, U.S. Patent Number 4,250,976 to Mochida, U.S. Patent Number 3,426,560 to Dwan.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (571) 272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher Boswell  
Examiner  
Art Unit 3676

CJB   
May 29, 2007